

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

YOUNG-HOON KIM

Application No.: Unassigned Art Unit: Unassigned

Filed: December 27, 2000 Examiner: Unassigned

For: PRISMATIC TYPE
 SEALED BATTERY
 AND METHOD FOR
 MAKING THE SAME

PRELIMINARY AMENDMENT

Assistant Commissioner for Patents
Washington, D. C. 20231

Dear Sir:

Prior to examination, Applicant requests that the referenced patent
application be amended as shown below.

09/18/26 12:27:00

In re Appln. of Young-hoon Kim
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IN THE TITLE

Please delete "TYPE".

IN THE SPECIFICATION

Page 1, line 7, delete "type";

line 8, change "a tightly sealing capability" to --tight seal-
ing--;

line 16, change "the" to --their--;

delete "type";

line 17, delete "type";

line 18, delete "type";

line 21, change "them together" to --the laminated elements--;

line 22, change "leading" to --lead--;

change "penetrating" to --penetrates--;

line 23, change "to be" to --and is--;

line 28, change "leading" to --lead--;

line 29, change "and then be" to--and--;

line 30, change "leading" to --lead--;

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line 32, change "leading" to --lead--;

line 33, change "the above of" to --above--;

line 35, delete "to then be";

line 36, change "cocking" to --caulking--;

line 37, delete "type";

change "a" to --the--;

Page 2, line 1, change "tightly sealing capability" to --seal--;

change "leading" to --lead--;

line 2, change "tightly sealing capability" to --sealing--;

line 3, change "by" to --of--;

lines 3-4, change "tightly sealing capability" to --tight seal--;

line 4, change "leading" to --lead--;

line 5, change "leading" to --lead--;

line 7, change "leading" to --lead--;

change "tightly" to --tight--;

line 8, change "tightly" to --tight--;

line 10, change "like" to --, as--;

line 13, change "tightly" to --tight--;

line 14, change "the human" to --humans--;

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change "a" to --the--;

line 16, change "leading" to --lead--;

Page 3, line 24, delete "type";

line 26, delete "type";

line 28, delete "type";

line 30, delete "type";

line 35, delete "type";

line 36, delete "capable of";

Page 4, line 1, delete "type";

line 2, delete "type";

line 7, change "electrolytic solution" to --electrolyte-- (both occurrences);

line 8, change "electrolytic solution" to --electrolyte--;

line 11, change "leading" to --lead--;

change "insert-connected" to --connected--;

line 14, change "leading" to --lead--;

line 19, change "fluorocarbon" to --fluorocarbons--;

line 22, change "inject-molded" to --injection-molded--;

line 25, change "an" to --the--;

line 26, change "electrolytic solution" to --electrolyte--;

line 29, delete "type";

line 30, delete "a" (first occurrence);

change "a" (second and third occurrences) to --the--;

change "leading" to --lead--;

line 32, change "leading" to --lead-- (both occurrences);

line 33, change "cocking" to --caulking--;

line 35, change "leading" to --lead--;

line 36, delete "formed of";

Page 5, line 3, delete "the";

line 5, change "leading" to --lead--;

line 6, delete "to be used";

line 9, delete "to be used";

line 16, delete "type";

line 19, change "leading" to --lead--;

line 22, change "leading" to --lead--;

line 23, change "zig" to --jig--;

line 24, change "leading" to --lead--;

line 25, change "zig" to --jig--;

line 26, after "Subsequently," insert --a coating of a--;
change "electrostatic-coated on" to --electrostatically

applied to--;

line 28, change "fluorocarbon" to --fluorocarbons--;

line 31, change "leading" to --lead--;

line 32, change "by" to --,-- (both occurrences);

change "each" to --thick, each--;

line 33, change "each" to --thick, each--;

line 35, change "filled" to --filling the space--;

change "leading" to --lead--;

line 36, change "primarily electrostatic-coated" to
--electrostatically applied--;

line 37, change "electrostatic-coating" to --electrostatically
applying--;

line 38, change "electrostatic coating" to --electrostatically
applying--;

line 39, change "filled" to --filling the space--;

change "leading" to --lead--;

Page 6, line 1, change "then be sealed" to --forming the seal--;

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line 2, after "preferably" insert --is--;

line 3, change "lightly sealing capability" to --tightness of the
seal--;

line 6, delete "type";

line 7, delete "type";

line 8, change "leading" to --lead--;

line 9, change ",", to --and--;

line 10, change "sealing capability" to --quality of the seal--;

lines 11-12, change "electrolytic solution" to --electrolyte--;

line 13, delete "of";

line 14, change "leading" to --lead--;

delete "thereby improving the";

line 15, after "productivity" insert --are improved--.

IN THE CLAIMS

1. (Amended) A prismatic [type] sealed battery, comprising:
a case for accommodating and hermetically sealing a power generating
element;

a [leading] lead terminal connected to [one] a first electrode of the power generating element and inserted into an opening of the case [to then be] and led outside; and

a fluoride resin, [filled] between the [leading] lead terminal and the case, [for] insulating the [leading] lead terminal and the case from each other and sealing the lead terminal to the case, wherein [another] a second electrode of the power generating element is electrically connected to the case.

2. (Amended) The prismatic [type] sealed battery according to claim 1, wherein the case includes a prismatic [type] can having an opening, and a cap plate having a through hole, welded to the can at the opening [of the can, having a throughhole].

3. (Amended) The prismatic [type] sealed battery according to claim 1, wherein the [leading] lead terminal includes a head and a connecting portion inserted into the opening of the case.

4. (Amended) The prismatic [type] sealed battery according to claim 1, wherein the leading terminal is [formed of one] a material selected from the group consisting of aluminum, [a] nickel [alloy] alloys, and a nickel plated material.

5. (Amended) The prismatic [type] sealed battery according to claim 1, wherein the case is [formed of one] a material selected from the group consisting of aluminum, [a] nickel [alloy] alloys, and a nickel plated material.

6. (Amended) The prismatic [type] sealed battery according to claim 1, wherein the fluoride resin is [one] selected from the group consisting of [fluorocarbon] fluorocarbons, tetrafluoroethylene-perfluoroalkylvinyl ether copolymer, and polytetrafluoroethylene.

7. (Amended) A method for making a prismatic [type] sealed battery in which a [leading] lead terminal connected to one electrode of a power generating element is fixed to a cap plate to be fixed to an opening of a can, and sealed, the method comprising [the steps of]:

arranging the [leading] lead terminal such that a connecting portion thereof penetrates a throughhole of the cap plate [to be led] and extends outside the cap plate and disposing a mask on the cap plate;

[electrostatic-coating] electrostatically applying a fluoride resin powder between the [leading] lead terminal and the cap plate; and

heating[,] and curing the fluoride resin powder [to then be sealed] and sealing the lead terminal to the cap plate.

8. (Amended) The method according to claim 7, wherein the fluoride resin powder is [one] selected from the group consisting of [fluorocarbon] fluorocarbons, tetrafluoroethylene-perfluoroalkylvinyl ether copolymer, and polytetrafluoroethylene.

9. (Amended) The method according to claim 7, [wherein the electrostatic-coating of] including repeating electrostatically applying the fluoride resin powder [is repeatedly performed] at least two times.

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10. (Amended) The method according to claim 7, further comprising
[the step of primarily electrostatic-coating] electrostatically applying
polytetrafluoroethylene powder[,] before [electrostatic-coating] electrostatically
applying the fluoride resin powder.

11. (Amended) The method according to claim 7, [wherein the]
including heating [temperature of] the fluoride resin powder [is] to 300 to
400°C to cure the fluoride resin powder.

12. (Amended) The method according to claim 7, [wherein the step of]
including heating and curing the fluoride resin powder [is repeatedly performed]
at least two times.

IN THE ABSTRACT

Please replace the existing Abstract of the Disclosure with the appended
Abstract of the Disclosure.

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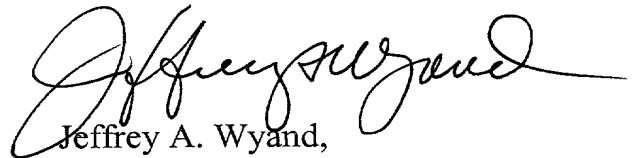
REMARKS

The foregoing changes are made to improve the form of the patent application. No new matter has been added and entry is respectfully requested.

A favorable Action on the merits is solicited.

Respectfully submitted,

LEYDIG, VOIT & MAYER


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ABSTRACT OF THE DISCLOSURE

A prismatic sealed battery with improved sealing between a case and a lead terminal connected from inside the case to outside of the case, and a method for making the battery. The prismatic sealed battery includes a case accommodating a positive electrode, a negative electrode, and an electrolyte, and a cap plate welded to an opening of the case and sealed, a lead terminal extending through a throughhole of the cap plate, and a fluoride resin between the lead terminal and the throughhole of the cap plate, insulating and sealing both elements. The lead terminal includes a head and a connecting portion inserted into the throughhole of the cap plate. The lead terminal is connected to one of the positive and negative electrodes and the case is electrically connected to the other electrode.